



Recycle This! Newsletter

*Newsletter of the Maine State Planning Office, Waste Management & Recycling Program * June 2006*



Legislative Up-Date

This past session, the Maine Legislature acted on several bills aimed at the management of solid waste in

Maine. From Legislative Document (LD) 141, which would have prohibited the disposal of construction & demolition waste in Maine, unless that waste was generated in Maine, to LD 1777 which was amended to create a Legislative Blue Ribbon Commission to study numerous solid waste issues (see below), to LD 1578 that would have broadened the definition of 'host community'.

LD 1777 – sets up a blue ribbon commission to study numerous questions related to solid waste and is to be staffed by the Department of Environmental Protection, with assistance from the State Planning Office, if requested. The commission's work would address three key issues: 1) import/export of waste; 2) management structure (i.e. how should solid waste be managed at the state level), and 3) the solid waste management hierarchy. In addition, the commission is to study the definition of "host community" for the purpose of eligibility for host community benefits; municipal solid waste incineration; the state recycling and waste reduction goals specified in Title 38, section 2132; and other matters considered relevant by the commission. The commission would meet 10 times between now and January 1, 2007.

LD 141 – was amended to read "The substitution of wood from construction and demolition debris for conventional fuels used in a boiler may not 50% of total fuel by weight combusted on an average annual basis." In addition, the committee directed the Board of Environmental Protection to adopt the proposed rule changes to DEP Rule Chapters 418 (Beneficial Use) and Chapters 402, 405 and 409.

What Does the Fortune Cookie Say?

This month the *Recycle This Newsletter* focuses on the rise of biofuels and supports the further sales and development of a supporting infrastructure. It is also fair to recognize the pioneers that took the first step with their personal commitment to make a difference. We salute those that paid the extra to give the hybrids a chance. Kudos go to the new economist at the State Planning Office, David Douglas.



Dave's normal car which has been adapted to be run on filtered vegetable oil in tank in the inside rear compartment.

When Dave's vintage white Mercedes station wagon first rolled into the parking lot, his new fellow employees took notice; however there was something else a little different. The difference was subtle and needed a clue from Dave to tell the rest of the story. The smell was not diesel, peanuts, LoMein, or Chop Suey. Dave evidently took his own initiative to make a few customizing revisions to create his own alternative fueled vehicle. Technically not a biofuel car, Dave's chariot uses processed kitchen grease or vegetable oil to fuel his vehicle.

David is quick to explain that he subjects spent cooking oil from a neighboring Chinese restaurant in Portland to a filter process that produces a fuel for his vehicle. In the back of the station wagon, one can notice that a separate fuel tank has been safely adapted for his needs.

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What Lies Ahead?

- Plenty of Ideas, a Lot of Energy, a Desire to Succeed and then What?

For those that missed this year's Maine Resource Recovery Association Annual Conference, the consensus is that you missed a well-organized, informative, and motivating program. Attendees left with all the energy found at a Super Bowl Game or sales convention. Before the first day was over, other meetings were being planned to test the recycling marketing waters.

The reason for the fervor was a young lady, Keefe Harrison, from the Carolinas, who described recycling so naturally that it seemed different. When her program was presented in North Carolina a couple years ago, it was different. Recycling became known as "RE3" for "Reduce, Re-use, Recycle" –



Successful RE3 message for a younger audience.

different but the same. RE3 then became identified by rap music, trendy commercials, creative posters, and an inventive T-shirt line – different and suddenly seen as an attention getter. The ad campaign was well-received.



Example of a fresh new look from RE3.



Example of RE3 poster ad.

What it was though - was fresh, honest, and multi-faceted enough to have at least something for everyone – not necessarily “in your face” but very much identifiable. An entire campaign had been designed and developed to put recycling or RE3 on the front burner. Once again recognized, we are left to ask “How is RE3 recognized?” Has a new image for recycling been sold or has the request to recycle been bought? The energy certainly is different and that is what happened here in Maine at the Samoset in April. Now we will have to see how we can channel that energy to the benefit of all through recycling – the same challenge but different.

What Next?

Maybe E3 -

Education, Economics, and the Environment?

Maine Recycles Week is all about communication and seems like another vehicle for the State to support the Recycling and Solid Waste Industry. It is expected that the summer MRW Steering Committee will be replaced by regional meetings to survey our appropriate audiences with the best way or ways to promote not only Maine Recycles Week but also Recycling in general.

One of the first suggestions to register has already been noted from a meeting of the reusable resource centers. With their appreciation for the State's interest in those that work so hard in reuse, the word was that they would like to be included in more promotion of the entire Hierarchy. They ask, rightfully so: “Isn't that one success to be learned from the North Carolina experience by returning to “RE3”? It is one point well taken.



Biodiesel for Maine

A project of the Maine Energy Investment Corporation and the Chewonki Foundation. Supported by the Maine State Energy Program and the U.S. Department of Energy.

P.O. Box 337, Brunswick, ME 04011
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WHY USE BIODIESEL?

***Biodiesel for Maine (BFM)** aims to build market demand for biodiesel to encourage in-state production and supply. To this end, BFM educates large consumers of diesel about biodiesel and encourages them to sign non-binding letters of interest, documenting demand.*

For an introductory presentation, call 207-729-9665.

Biodiesel is good for Maine's...

...economy and security

Fuel Economy - In addition to the fact that diesel fuel (petroleum or bio-based) gets better mileage than gasoline, biodiesel is also efficient to produce. Biodiesel yields around 3.2 units of fuel product for every unit of fossil energy consumed in the lifecycle, four times as much as regular diesel.¹

Economy - Restaurants and many other businesses now pay to dispose of waste grease. Maine-made biodiesel could reduce these costs *and* reduce the price of the resulting biodiesel.

Security - Importing foreign oil increases dependence on the Middle East and decreases global stability. Homegrown fuels ensure both energy independence and secure, predictable supplies.

... natural environment

Global Warming - Pure biodiesel cuts carbon dioxide emissions by 78% over petrodiesel, thereby contributing far less to global warming.²

Air pollution - Pure biodiesel produces roughly 50% less particulate matter (soot) and substantially fewer unburned hydrocarbons and carbon monoxide emissions than its fossil fuel counterpart.³ Biodiesel is lead free, and contains few aromatics such as benzene and xylene.⁴

Toxicity and biodegradability - Biodiesel biodegrades more easily than sugar and is less toxic than table salt.⁵ In fact, biodiesel is so safe it is used to clean up crude oil spills--it dissolves the oil and floats it to the surface for easier collection.⁶

... public health

Less carcinogenic - Pure biodiesel (B100) emits 60-90% fewer air toxics like formaldehyde and benzene. Exposure to these toxics can increase the risks of cancer, immune system disorders and reproductive problems, among other effects.⁷

Fewer premature deaths - A National Renewable Energy Laboratory study estimated that changing Southern California Fleets to 20% biodiesel (B20) could reduce premature death from particulate matter in the area by 5%.⁸

Less lung disease - Biodiesel cuts soot emissions 50% over petrodiesel.¹¹ For diesel handlers, truck and bus drivers, for example, this means reduced risks of respiratory distress, related ailments and even premature death.⁹



A septic truck powered by Green Bean Bio-Fuel



A Falmouth fire truck running on biodiesel. The Town of Falmouth runs its fleet and school buses on biodiesel. The City of Portland is following suit, currently piloting B20.

*Biodiesel is not the same as vegetable oil. Vegetable oil can also be used as a fuel, but it requires engine modifications. For more information, see http://journeytoforever.org/biodiesel_svo.html

¹SoyPower, "Life Cycle Summary." www.soypower.net

²Pahl, Greg. *Biodiesel: Growing a New Energy Economy*. White River Junction: Chelsea Green Publishing Company, 2005. p. 57.

³Union of Concerned Scientists, "Clean Vehicles," 2004. www.ucsusa.org

⁴Pahl, p. 57.

⁵Ibid. p. 58.

⁶Ibid., p. 73.

⁷Union of Concerned Scientists.

⁸Morris, R.E., A.K. Pollak, G.E. Mansell, C. Lindhjem, Y. Jia, and G. Wilson, "Impact of Biodiesel Fuels on Air Quality and Human Health," *National Renewable Energy Laboratory*, 2003. www.nrel.gov/docs/fy03osti/33793.pdf

⁹Union of Concerned Scientists.

¹⁰Ibid.

¹¹National Biodiesel Board, "Home Heating Oil," 2004. www.biodiesel.org

¹²Ibid.

¹³Massachusetts Oilheat Council, "The Latest on Biofuel," 2004. www.massoilheat.org

¹⁴Handley, Rick, Northeast Regional Biomass Program, speaking at a Biofuels Workshop, June 9, 2005.

¹⁵Energy Information Administration, U.S. Department of Energy, "Non-transportation Fuel Sales in Maine," 2005. www.eia.doe.gov



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A Bangor tractor filling up with biodiesel
The City of Bangor has run its fleet on B20 since spring, 2005

- photo courtesy of Bob Darwes



Frontier Energy delivering BioHeat™
Frontier has supplied the Maine State Government with BioHeat™ since 2003

AVAILABLE NOW!

Biodiesel at the Pump!

Frontier Energy

800-773-2409
1166 Route 3
South China, ME 04358

Green Bean Bio-Fuel

207-495-3199
163 Penny Lane
Belgrade, ME 04917

Maritime Farms

207-785-2226
Route 17
Union, ME 04862

MDI BioFuels LLC

207-469-8127
44 Russell Farm Road
Bar Harbor, Maine 04609

Solar Market

207-985-0088
25 Limerick Road
Arundel, ME 04046



Maritime Farms in Union, Maine. photo by Rebecca Rockefeller

Heat with Biodiesel!

- Cleaner filters, nozzles and strainers mean reduced maintenance costs.¹¹
- Improved exhaust odor.¹²
- Reduced emissions of sulfur oxide, nitrogen oxide, carbon monoxide and smoke.¹³
- Adding even a small amount of biodiesel to number 2 oil could help stabilize the supply of heating oil and mitigate price changes.¹⁴
- In 2004, Maine alone used an average of 1,112,670 gallons of number 2 heating oil per day.¹⁵ A 5% blend of biodiesel in every Maine furnace would save roughly 56,000 gallons of fossil fuels a day or 20 million gallons of petroleum per year...
 - ✓ reducing dependence on foreign oil,
 - ✓ reducing pollution,
 - ✓ and slowing climate change.

Today, for your home or business, call...

- **Augusta-Waterville area:** *Frontier Energy*, 1-800-773-2409.
- **Rockland-Belfast area:** *Rockport Mechanical*, 207-236-4172.
- **Saco to Brunswick:** *Independence Fuel*, 1-800-228-1883.
- **Augusta to Kittery:** *American Alternative Energy LLC*, 207-854-8942.
- **Mount Desert Island area:** *MDI BioFuels*, 207-469-8127.

I See, I See, I See a... All of 50%

Traditions are like the knight in shining armor, who is easily misplaced in time, jumping up and down in one place protected from the world around, accomplishing little, going no where, and risking nothing.

Change is seldom comfortable and can even be frightening to us at times. Change may also be that gamble that can be so exciting and make dramatic results happen.



Wishful Thinking

It is the anticipation of excitement that is being experienced by many in the recycling field now. It is knowing that the efforts to this point are noteworthy and have given us the knowledge and perhaps confidence to feel that we can collectively do better. In many cases, the actual mechanics may not change or may not need to change; however in almost every case the “image” of recycling will hopefully be revisited, reformed, and resold (Let’s call the campaign – “Using the 3 R’s to our best advantage”). This simply suggests and stresses the importance of communication.

Why a new image? How can we repackage something as simple as “recycling”? Why would we start over, when we have come so far? How can we successfully sell something that should be second nature by now?

More fifteen years ago when we were first starting out, the Maine Waste Management Agency had the “dog and pony show” about “Getting the Word Out”. Just as then we know the importance of education and communication. Over time though, emphasis has fallen on schools and children, and in many respects assumed that adults know all there is needed to know about recycling. Are we just ignoring the issues? If we were to put a positive spin on it, we might wonder of ourselves: how often; to whom; and when was the last time we communicated our message? As you read this, can you remember what the headlines were or the top ten hits were 10 or 20 years ago?

Actually what is happening now is that we recognize that we need to “reframe” and “invigorate” our message to both longtime, as well as, new members of our communities. It recognizes that maybe the residents and property owners are two different audiences, among others. We have to communicate to renters, tourists, and members of every identifiable audience and connect them with the appropriate message. Think of our efforts like a business and accept that there may be costs associated with selling our services and should be budgeted. Communication is important. The challenge to each of us is to identify what we would do differently to increase recycling might easily be rephrased (another R), as what we say and how often we say it?

The Recycling Industry has our own committed souls, as well. These celebrities are those residents who try so hard that they have almost discovered 100% recycling. Why not plan on a Recycling Hall of Fame for your community for Maine Recycles Week 2006? Plan to identify and recognize those individuals who go the extra step to recycle and recycle well.

Fortune Cookie *(Cont’d from Page 1)*

In an early conversation, David noted that he has already discovered his sources drying up. Where once there could be an abundance of oil, Dave observes a diminishing supply and is quick to point out that now he may even have to pay for the oil that once was his to rescue. We in the office are still waiting to see if our new coworker develops any kind of weight problem from his chosen mode of transportation or will he just turn out to be always hungry.



Oil tank in rear

To smell the odor of Dave’s processed vegetable oil fuel:

Scratch Here ☒



If you had this electronically ,
it would all be in color. Sign up today.
Contact us at www.recyclemaine.com.

The “Biodiesel for Maine” insert courtesy of Rebecca Rockefeller

Maine State Planning Office
Waste Management & Recycling Program
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www.recyclemaine.com



The much touted and recently studied Maine E-waste law goes into effect on July 20, 2006, the television and computer monitor disposal ban goes into effect.

Has your community received their free recycling sign for your facility?

You may receive this 30"x24" metal sign free for posting in a conspicuous spot to let your citizens know that certain items now must be recycled.

For the sign, contact the State Planning Office.
Call, (207) 287-8053 or
e-mail, www.recyclemaine.com.